



FTG/FWF 30E 3G4G and FEXT 20D/40D MODEM Firmware Upgrade Instructions

This document provides instructions on how to upgrade your device's firmware for the following models:

- FG-30E-3G4G
- FWF-30E-3G4G
- FEXT-20D
- FEXT-40D

MODEM Overview

The FortiGate-30E-3G4G and FortiExtender devices are equipped with a Sierra Wireless EM7355 internal LTE MODEM for the North American market and a EM7305 for markets outside North America. The EM7355 MODEM is supported by multiple wireless carriers in North America, such as Verizon, AT&T, Sprint, Rogers, Telus and others. The EM7305 MODEM is an international version of EM7355, that is supported in Europe, South America, Asia and other areas.

Some wireless carriers have different MODEM or profile requirements and a firmware upgrade is needed. If you determine that the default 'generic firmware' is not compatible for your needs, please download the MODEM firmware (CWE) or profile (NVU) files from the respective directory from Fortinet support site and perform an upgrade.

Prepare for an Image Upgrade

Copy the paired image files to an FTP server, TFTP server or a USB disk. DO NOT change the file names as the FortiGate, FortiWiFi or FortiExtender device retrieves the image information based on the file names.

Download MODEM Images to the FortiGate/FortiWiFi/FortiExtender

The MODEM image pair files, CWE and NVU, must be downloaded to the device before the upgrade process can be initiated.

Please execute the following commands in this order:

```
execute lte-modem get-modem-firmware ftp <name.cwe> <FTP IP> ftpuser 1234
```

```
exec lte-modem get-pri-firmware ftp <name.NVU> <FTP IP> ftpuser ftpass
```

```
exec lte-modem start-upgrade
```

Please wait for upgrade process to finish. This normally takes approximately 2 minutes.

Example MODEM image command and response sequence

```
FW30EN3U16000115 # exec lte-modem get-modem-firmware ftp SWI9X15C_05.05.58.00.cwe
172.16.200.55 root 123456 ====>>>>upload modem firmware
Please wait...
```

```
Connect to ftp server 172.16.200.55 ...
Get image from ftp server OK.
```

```
FW30EN3U16000115 # exec lte-modem get-pri-firmware ftp SWI9X15C_05.05.58.00_Telus_
005.023_000.nvu 172.16.200.55 root 123456 ====>>>>upload modem pri file
Please wait...
```

```
Connect to ftp server 172.16.200.55 ...
Get image from ftp server OK.
```

```
FW30EN3U16000115 #
FW30EN3U16000115 # exec lte-modem start-upgrade ====>>>> do upgrade
You are going to burn the following images into your LTE modem.
```

```
-----
Modem image: SWI9X15C_05.05.58.00.cwe
PRI image: SWI9X15C_05.05.58.00_Telus_005.023_000.nvu
-----
```

```
The original images on your LTE Modem will be replaced!
Do you want to continue? (y/n)y
```

```
Starting LTE Modem firmware upgrade, please don't power off your device
until the whole porcess is done!
```

Change Log

November 8, 2016

Initial release.

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